



HP Officejet Pro L7580

Teardown

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TOOLS:

- [T8 Torx Screwdriver \(1\)](#)
- [T20 Torx Screwdriver \(1\)](#)
- [Tweezer \(1\)](#)
- [Wire cutter/stripper \(1\)](#)

SUMMARY

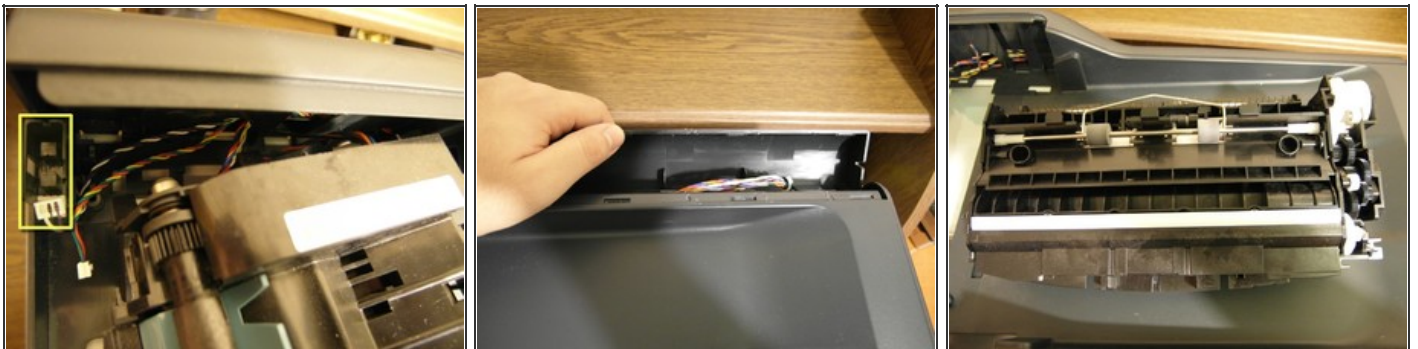
L7580 is a great multifunction printer from HP. Here we will discover what's inside the printer and remove its sensors and DC motors.

Step 1 — Removing the automatic document feeder.



- Remove the three T8 Torx screws from the paper feeder.
- Lift the white surface to reveal the two notches.
- Push the notches to detach the paper feeder mechanism.

Step 2



- After removing the paper feeder, you will notice the slotted opto switch.
- Remove the back cover to demount cable jacks.
- Pull and detach the paper feeder mechanism.

Step 3



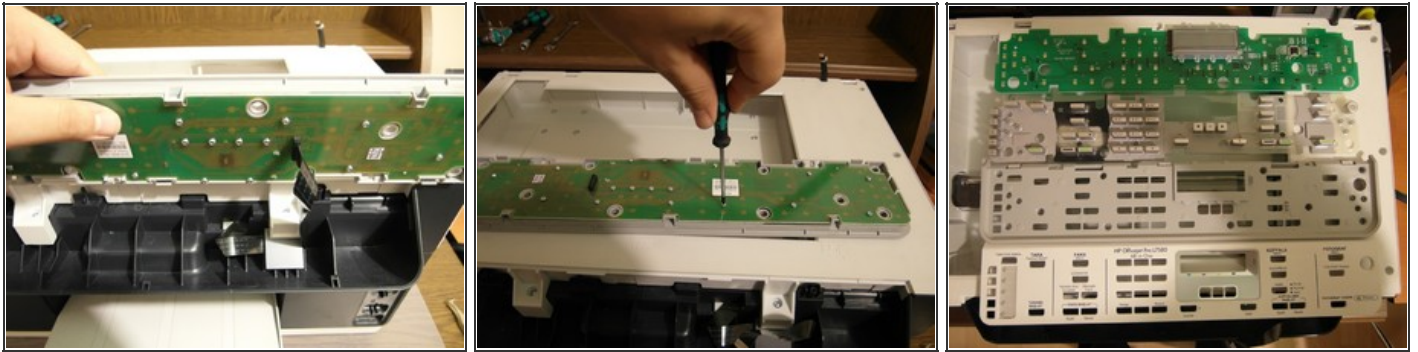
- Remove the T8 Torx screws from the right cover.
- You will see the feeder's mechanics after removing the cover.
- Remove the top cover, and here is the first DC motor and its encoder.

Step 4 — Removing the top cover



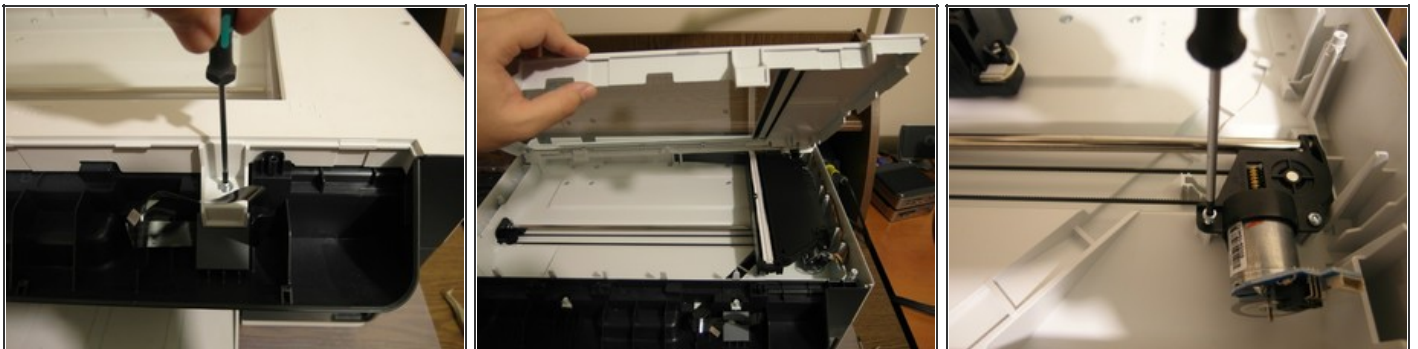
- Pull the scanner cover up to detach it from the main body. Then, remove the T8 Torx screws around the scanner window.
- Remove the control panel by pulling it.
- Finally, remove the inner layer of the control panel by forcing the notches.

Step 5



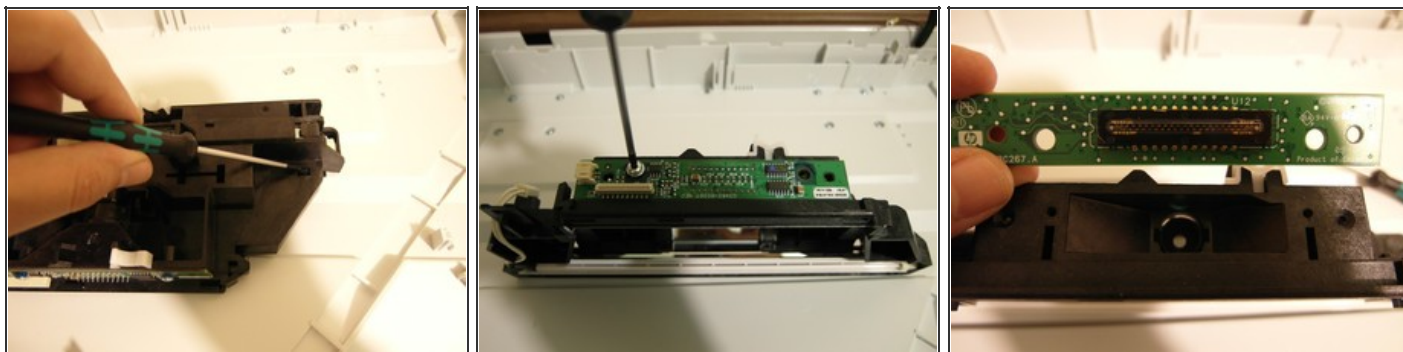
- Remove the flat cable from the control panel.
- Remove the T8 Torx screws to see what's inside the control panel.
- Then, we will see the 4 layers of the control panel.

Step 6 — The scanner mechanism



- Remove the two T8 screws to detach the scanner cover.
- Lift the cover up to reveal the scanner mechanism.
- And we have our second DC motor and encoder. Plus, a carrier mechanism.

Step 7 — Scanning head and sensor



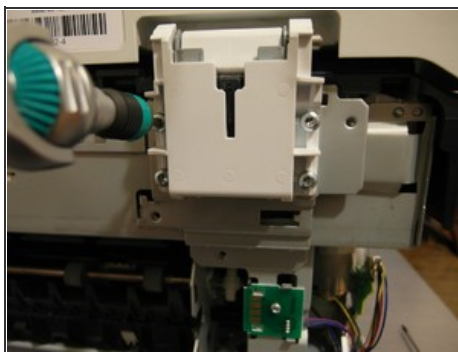
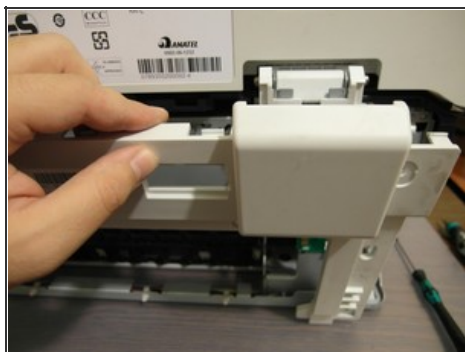
- Remove the scan head's top cover by pressing the two notches on the back.
- Remove the T8 screws of the circuit board.
- Here is the scanner sensor and the objective.

Step 8



- Remove all the screws from the back, including the ones inside the 3 covers.
- Remove the two screws from the top of the cartridge-change cover.
- Detach the two side covers by pulling them.

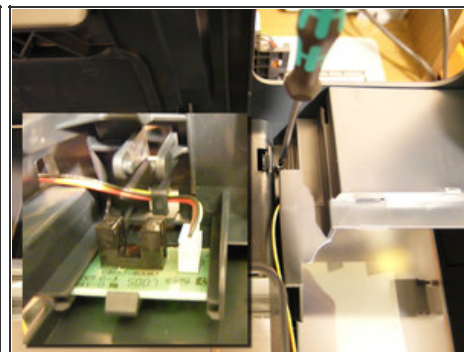
Step 9 — Detaching the scanner section



- Detach the back cover.
- Remove the 4 screws from the both hinges.
- The hinges can pop up suddenly, so be careful.
- Then, remove the scanner cover to reveal the printing mechanism.



Step 10



- Remove the screws on the cover.
- You will notice the speaker below the cover.
- Remove the screws holding the cartridge door. There is another slotted opto switch here.

Step 11



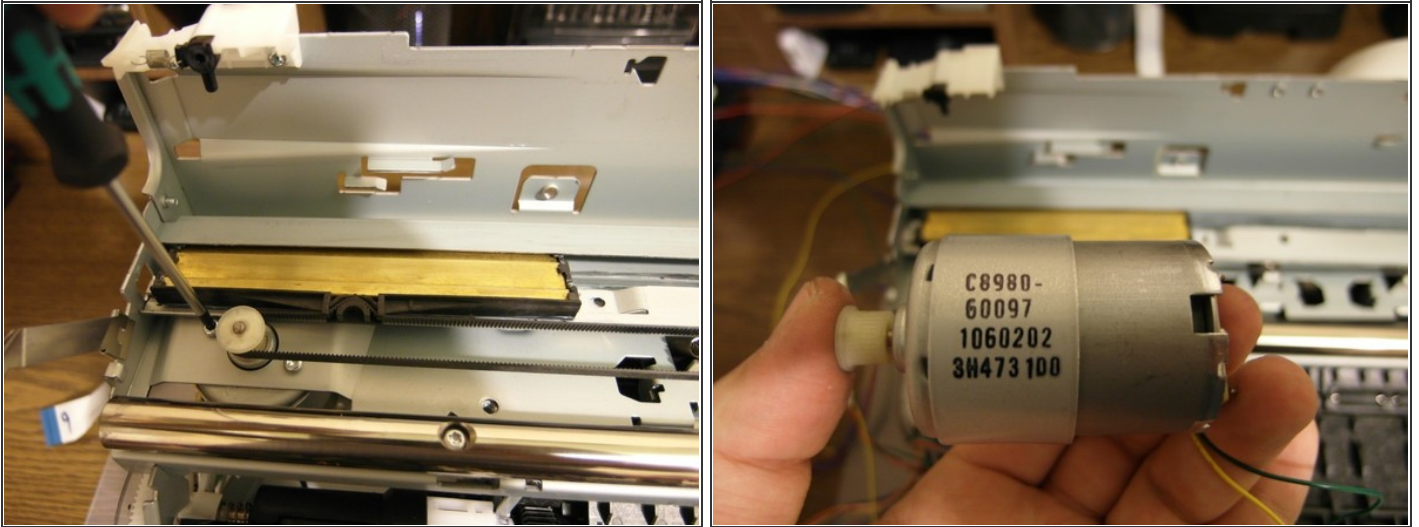
- There is an extra weight block on the print mechanism to prevent vibration.
- Remove the red marked screw to detach the ink hose.
- Remove the green marked screw to detach the ink cartridge slot.
- Finally, we have the ink hose and the nozzles.

Step 12 — The mainboard



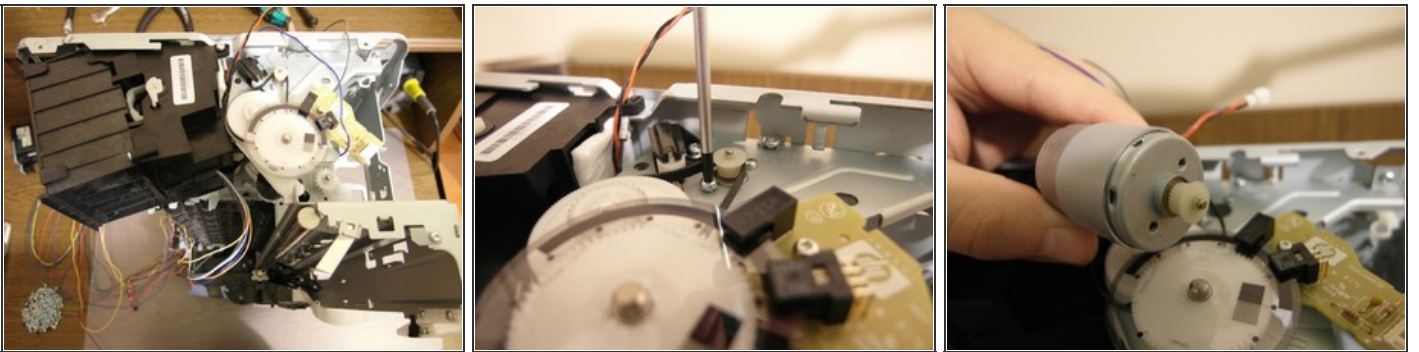
- Remove the screws to detach the mainboard of the printer.
- The board has a power input, an Ethernet connector, a USB device port, phone line input and outputs, memory card slots, a USB host port, various internal connectors and a CR2032 RTC battery.

Step 13



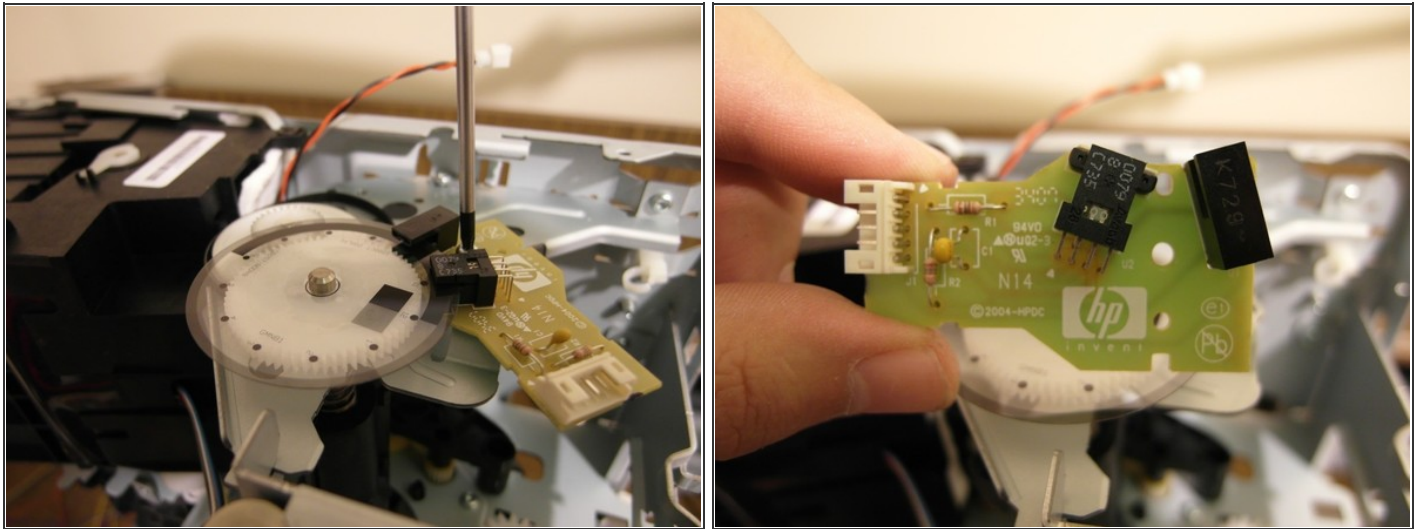
- Remove the screws holding the print head's motor.
- And we have a DC motor here.

Step 14



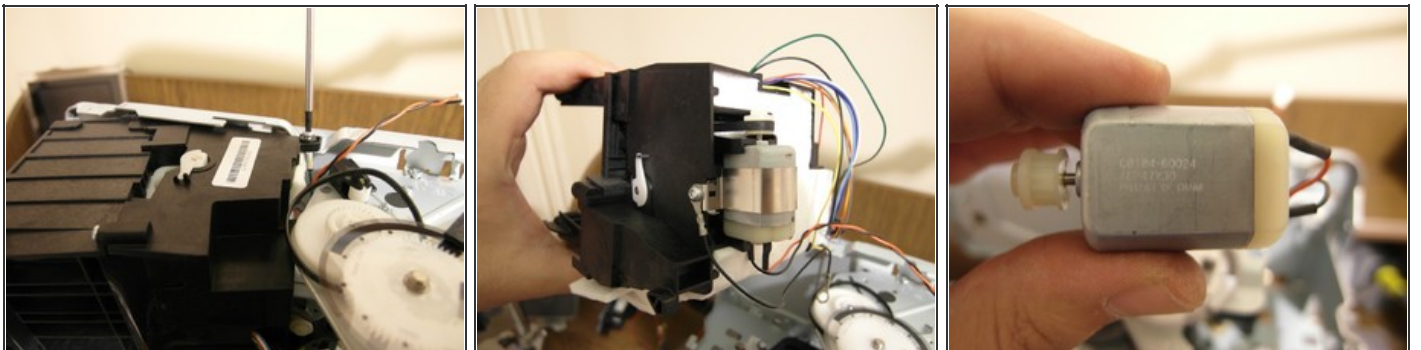
- Rotate the printer right to reach the other DC motor.
- Remove the two screws connecting the motor to the body.
- We will have another DC Motor.

Step 15



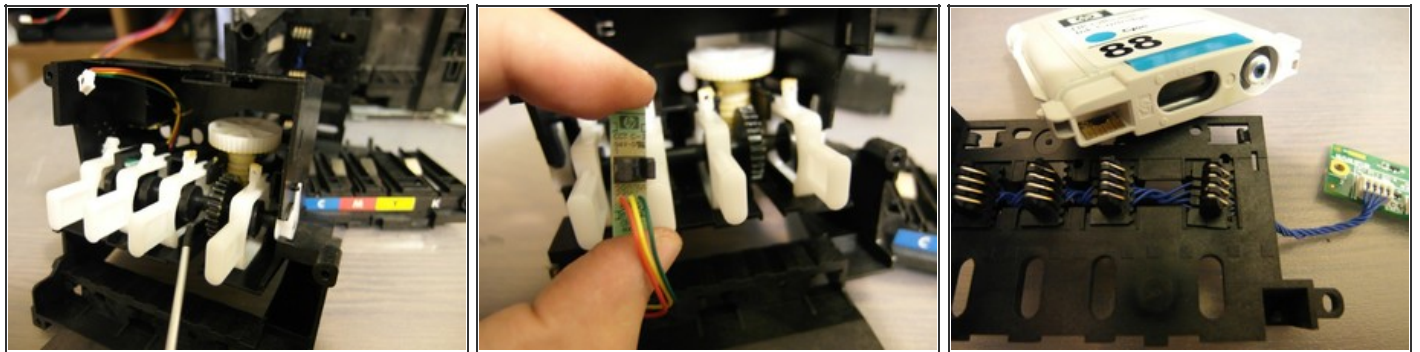
- Remove the screw to get the slotted opto switches.

Step 16



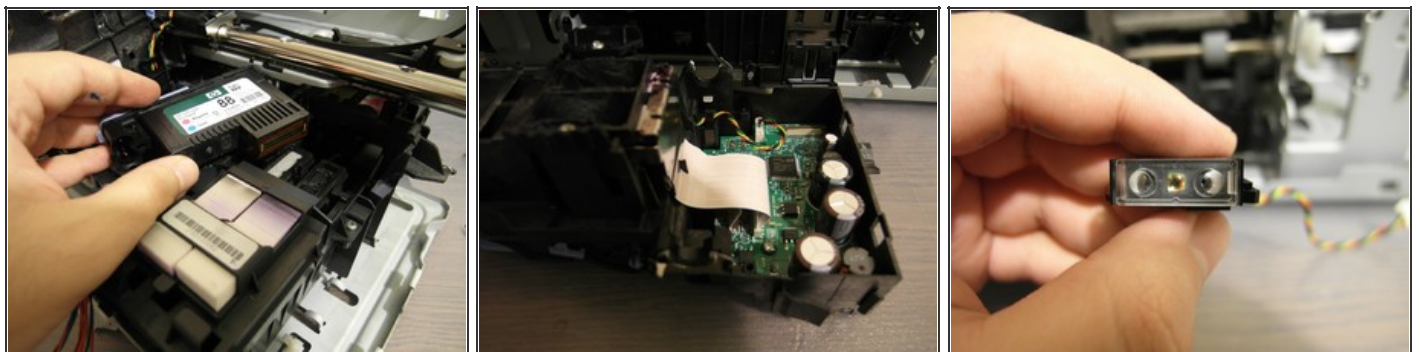
- The L7580 has a lot of DC motors inside. Detach the ink cartridge slots by removing the screws to discover another DC motor.

Step 17 — Ink cartridge mechanism



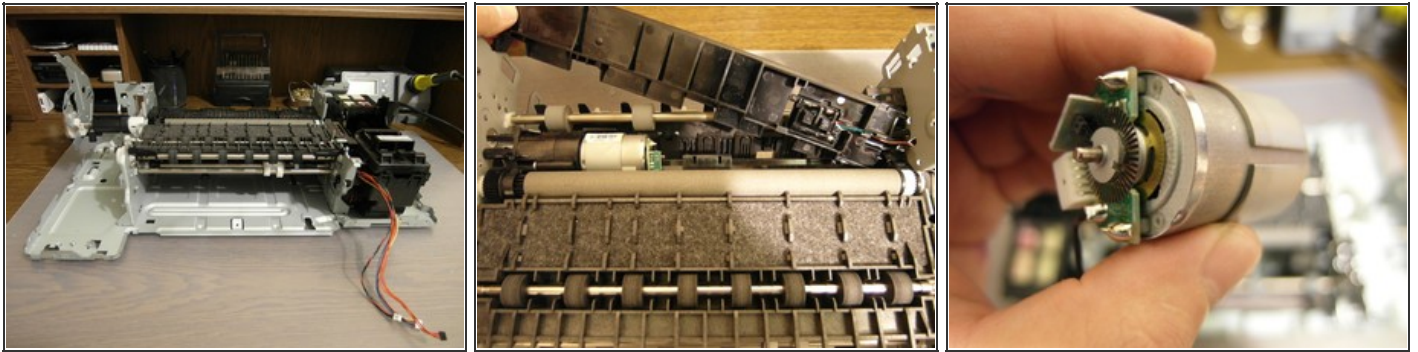
- This is the ink cartridge pumping mechanism. The last DC motor we detached controls this mechanism.
- The opto switch reports the mechanism's position.
- Communication between the board and cartridges is being established by serial data line as I guess.

Step 18 — Master print head



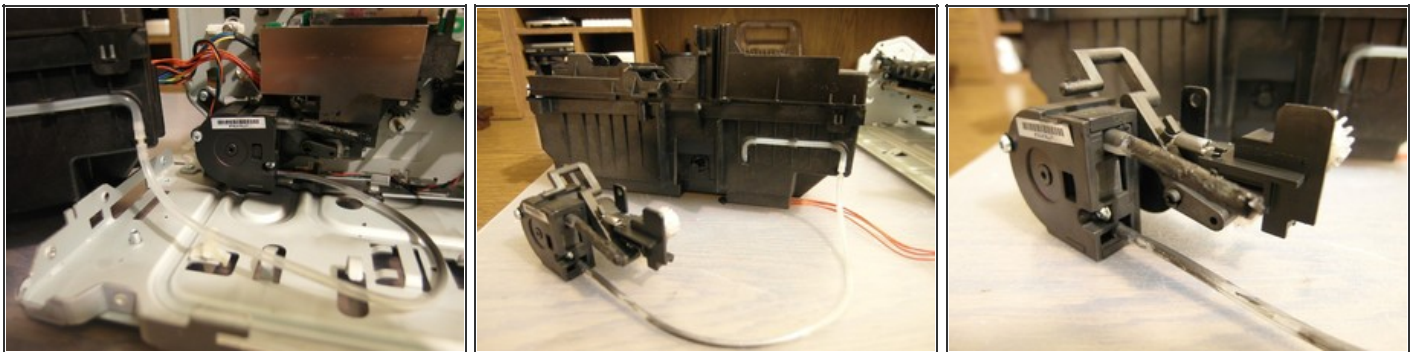
- Then, we see here the print head cleaning mechanism.
- The master print head (which includes two removable heads) has a circuit board inside.
- And this is the paper type detector. It has been compacted a bit when comparing to previous versions.

Step 19



- Reaching to the bottom layer, this is the paper feeding mechanism.
- By removing the top cover, we discover the sixth and the last DC motor with its encoder.

Step 20 — The air pump



- At the final step, we discover an air pump for the print head cleaning mechanism. It's surprising!

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